



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,908	07/26/2006	Julien Hernandez	004900-273	3883
21839	7590	02/24/2009	EXAMINER	
BUCHANAN, INGERSOLL & ROONEY PC			ABU ALI, SHUANGYI	
POST OFFICE BOX 1404				
ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER
			1793	
			NOTIFICATION DATE	DELIVERY MODE
			02/24/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<i>Office Action Summary</i>	Application No.	Applicant(s)
	10/562,908	HERNANDEZ ET AL.
	Examiner	Art Unit
	SHUANGYI ABU ALI	1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 15 December 2008.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 28-54 is/are pending in the application.  
 4a) Of the above claim(s) 41-54 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 28-40 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 12/30/2005.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_.

DETAILED ACTION

*Election/Restrictions*

Applicant's election with traverse of group I, claims 28-40 in the reply filed on 12/15/2008 is acknowledged. The traversal is on the ground(s) that it is not a burden to examine all the claims. This is not found persuasive because the Examiner respectfully submits that the restriction is made based on PCT practice rule and thus any arguments based on a restriction for US practice are moot. Applicant presents no clear arguments as to why a restriction under the PCT rule is improper.

Finally and assuming further arguendo about the "serious burden" aspect, it is to be noted that all the groups are classified in different areas (the composition comprising silica and a method of making silica composition by filter press) within the office thus a serious burden is apparent.

The requirement is still deemed proper and is therefore made FINAL.

*Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "moderate" in claim 30 is a relative term which renders the claim indefinite. The term "moderate" is not defined by the claim, the specification does not

provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 28-31 and 33-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. patent No. 3,753,751 to Shannon et al., in view of GB 2256192

Regarding claims 28, 31, 33, 34 and 36-37, Shannon et al. disclose a method of making insulation material (reinforced) by route of filter-press technique by dispersing insulation material in water to form slurry, then the slurry is partially dewatered and followed by treatment under heat and pressure. Further, a drying process is carried out to form the insulation material. ( col. 7, line 1-21)

But they are silent that the silica used in the process is precipitated silica. However, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to use precipitated silica in the above process, motivated by the fact that GB 2256192, also drawn to insulation material, discloses that precipitated silica can be used with rutile opacifier and ceramic fiber to form insulation material cheap and having improved physical reinforcement (pages 2-3).

Regarding claims 29 and 30, Shannon et al. disclose that the applied pressure is several hundred pounds per square inch depending upon the nature of the ensuing procedures.

Regarding claim 35, GB'192 discloses that the ratio of precipitated silica to reinforcement is 48:6.7.

Regarding claim 38, GB'192 discloses that the ratio of precipitated silica to rutile is 48:33.3.

Regarding claim 39-40, without showing unexpected results, the claimed temperature cannot be considered critical. Generally, differences in temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235. “

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over combined teaching of U. S. patent No. 3,753,751 to Shannon et al. and GB 2256192, as applied above, further in view of U. S. Patent No. 4,590,052 to Chevallier et al.

Regarding claim 32, GB'192 discloses the silica has a BET of 170 m<sup>2</sup>/g. But they are silent about the CTAB value of the silica. However, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to use the silica having the CTAB as applicant set forth in claim 32, motivated by the fact that Chevallier et al., also drawn to precipitated silica, disclose that silica having a BET of 50-350 m<sup>2</sup>/g and a CTAB in the range of 20-350 m<sup>2</sup>/g has good insulation property (col. 1, lines 10-16 and col.3, lines 11-19).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHUANGYI ABU ALI whose telephone number is (571)272-6453. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sa

/Michael A Marcheschi/  
Primary Examiner, Art Unit 1793